

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Brian David Marsh et al.
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For : Managing Content Based on Reputation

Examiner : Jonathan G. Sterrett
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Mail Stop Appeal Brief - Patents
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REPLY BRIEF

Commissioner for Patents:

This brief is in response to the Examiner's Answer dated December 7, 2010 for the Appeal Brief filed September 22, 2010, and to the final Office Action for this application dated April 22, 2010. In addition, this brief is in furtherance of the Notice of Appeal, filed for this application on July 22, 2010.

The Director is authorized to charge any additional fees that are due by way of this filing, or credit any overpayment, to our Deposit Account No. 19-1090.

I. STATUS OF CLAIMS

Claims 11-38 and 49-72 are currently pending, and claims 1-10 and 39-48 are canceled. The currently pending claims 11-38 and 49-72 are rejected. The rejections of the non-allowed claims 11-38, 49-56 and 58-72 are being appealed. The rejection of claim 57 is not being appealed.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 11-38 and 59-70 are obvious under 35 U.S.C. § 103(a) based on a combination of Tiwana et al. (a non-patent reference entitled “A Social Exchange Architecture for Distributed Web Communities,” hereinafter “Tiwana”) and Williams et al. (U.S. Patent No. 6,952,678, hereinafter “Williams”).

Whether claims 71-72 are obvious under 35 U.S.C. § 103(a) based on a combination of Tiwana, Williams and Konstan et al. (a non-patent reference entitled “Recommender Systems: A GroupLens Perspective,” hereinafter “Konstan”).

Whether claims 49-56 and 58 are obvious under 35 U.S.C. § 103(a) based on a combination of Tiwana and Delgado et al. (a non-patent reference entitled “Memory-Based Weighted-Majority Prediction for Recommender Systems,” hereinafter “Delgado”).

III. ARGUMENTS

A. Rejection of Claims 11-38 and 59-72 Under 35 U.S.C. § 103(a) based on Tiwana, Williams and Konstan

A combination of the Tiwana and Williams references, whether with or without a further combination including the Konstan reference, fails to disclose or otherwise render obvious the elements of either independent method claim 11 or independent computing device claim 59, nor the claim elements of claims 12-38 and 60-72 that depend from those independent claims. Thus, these claims are not obvious in light of the Tiwana, Williams and Konstan references, whether alone or in combination.

Moreover, in the Appeal Brief filed September 22, 2010 (referred to herein as “the Appeal Brief”), Appellant demonstrated that the Tiwana, Williams and Konstan references fail to disclose or otherwise render obvious several claim elements recited in each of the independent claims 11 and 59, as discussed briefly below, and in greater detail in the Appeal Brief. Accordingly, the final Office Action dated April 22, 2010 (hereinafter “the final Office Action”) fails to establish that these claims are obvious in light of the Tiwana, Williams and Konstan references. While these claims are discussed together here for the sake of brevity, independent claims 11 and 59 and dependent claims 71-72 have each been argued separately in the Appeal Brief, and are separately patentable for the various reasons discussed in the Appeal Brief, and these statements herein are not intended to change the separate patentability of those claims demonstrated in the Appeal Brief.

The Examiner’s Answer dated December 7, 2010 (referred to herein as “the Examiner’s Answer”) has responded to Appellant’s demonstration in the Appeal Brief by mischaracterizing various of the recited claim elements and corresponding aspects of Appellant’s statements in the Appeal Brief, as well as making allegations that are clearly incorrect. Accordingly, Appellant addresses these allegations and mischaracterizations below.

As a brief restatement of the demonstration made in the Appeal Brief with respect to independent claims 11 and 59, each of those claims is generally related to automated

operations of one or more programmed computing systems or configured computing devices that include, after receiving evaluations of a single piece of content from multiple evaluator users that each includes a quantitative assessment of that content, automatically updating an assessed reputation weight for one of those evaluator users based on a relationship of that one evaluator user's quantitative assessment for that content piece to the quantitative assessments of other of the evaluator users of that same content piece. As discussed in Appellant's application as filed, such assessment of a particular evaluator user's quantitative assessment of a content piece relative to other evaluator users' quantitative assessments of the same content piece may provide various benefits, including to automatically evaluate the ability of that particular evaluator user to demonstrate consensus with other evaluator users.

Conversely, the Tiwana, Williams and Konstan references (whether alone or in combination) fail to disclose any functionality related to updating an evaluator user's assessed reputation weight based on a relationship between the quantitative assessments provided by the evaluator user in an evaluation of a piece of content and the quantitative assessments provided by other evaluator users in evaluations of the same piece of content.

1. Assessing Content Evaluation Activities Of Evaluator Users Based On Their Evaluations Of The Same Piece Of Content

As a first mischaracterization that is presented in the Examiner's Answer, the Examiner's Answer argues for the first time that independent claims 11 and 59 do "not recite that the quantitative assessments from the other evaluator users are specifically for the same item review, but rather more broadly that the quantitative assessments are 'from the evaluations of other of the evaluator users'." (Examiner's Answer, page 36 with respect to claim 11, and page 46 as also applied to claim 59). The Examiner's Answer then proceeds on pages 36-45 to allege that, given this new interpretation of claim 11, the Tiwana and Williams references disclose functionality that is sufficient to render claim 11 obvious – in particular, the Examiner's Answer appears to allege that any evaluations by any users at any time that affect some user's reputation would be sufficient to disclose claim elements of independent claims 11 and 59 relating to updating evaluation users' reputation weights. For example, the Examiner's Answer repeats this new contention about the interpretation of the claim elements of claim 11 multiple times in the

following pages (*see, for example*, pages 38, 39 and 40 of the Examiner's Answer), in an apparent attempt to identify any disclosure of Tiwana or Williams that is relevant to the recited claim elements of claim 11, based on identifying widely disparate activities of different users and attempting to analogize them to the recited claim elements.

However, these allegations in the Examiner's Answer regarding the interpretation of claims 11 and 59 are clearly wrong, and these errors in claim interpretation demonstrate that the Tiwana and Williams references lack any relevance to the actual recited claim elements. For example, with respect to claim 11, it first recites the following (with alphabetical identifiers added here for reference purposes):

- (a) receiving from a reviewer user a review related to an item available from a Web merchant, the receiving of the review being performed by one or more programmed computing systems of the Web merchant;
- (b) receiving multiple evaluations of the review, each of the multiple evaluations being from one of multiple evaluator users who each has an existing reputation weight for the Web merchant that is based at least in part on previous evaluations supplied by that evaluator user for multiple other reviews for items available from the Web merchant, each received evaluation including a quantitative assessment of contents of the review for each of one or more of multiple content rating dimensions available for use in assessing the review;

Thus, as recited above in claim element (a), a single review is received, which in this recited embodiment is related to an item available from a Web merchant. Subsequently, as recited above in claim element (b), multiple evaluations of that single review are received from multiple evaluator users, with each of those received evaluations including a quantitative assessment of the contents of that single review.

Claim 11 subsequently recites the following (with alphabetical identifiers again added here for reference purposes):

- (d) automatically updating the existing reputation weights for each of one or more of the evaluator users based on a relationship of the quantitative assessments from the evaluation of that evaluator user to the quantitative assessments from the evaluations of other of the evaluator users, the automatic updating being performed by the one or more programmed computing systems;

Thus, as recited above in claim element (d), a relationship of "the quantitative assessments from the evaluation of that evaluator user" to "the quantitative assessments from the evaluations of

other of the evaluator users” is used to automatically update the reputation weight of that evaluator user, for each of one or more of the multiple evaluator users. As is clear from the language of claim 11, the recited claim language of “the quantitative assessments from the evaluation of that evaluator user” for each of one or more content rating dimensions in claim element (d) obtains antecedent basis only from claim element (b), with respect to that evaluator user’s evaluation of the single item review first introduced in claim element (a). Similarly, as is clear from the language of claim 11, the recited claim language of “the quantitative assessments from the evaluations of other of the evaluator users” also obtains antecedent basis only from claim element (b), with respect to those other evaluator users’ evaluations of that same single item review first introduced in claim element (a). Accordingly, the only possible interpretation of these recited claim elements of claim 11 that is consistent with the actual language of the claim is that the various evaluations that are used in the automatic updating of one or more evaluator users’ reputation weights are evaluations of a single piece of content (which in claim 11 is the single item review, whose contents are being assessed), with the updating being based on determined relationships between different evaluator users’ quantitative assessments of the contents of the same item review.

In a similar manner, claim 59 recites the following (with alphabetical identifiers added here for reference purposes):

... a content rater component configured to, when executed by at least one of the one or more processors:

(A) receive from a reviewer user a review related to an item available from a Web merchant;

(B) receive evaluations of the review from each of multiple evaluator users, each received evaluation including a quantitative assessment of contents of the review for each of one or more of multiple content rating dimensions available for use in assessing the review, each of the evaluator users having a single existing reputation weight for the Web merchant based at least in part on previous evaluations supplied by that evaluator user for multiple other reviews for items available from the Web merchant; and

(C) automatically generate at least one aggregate assessment of the content of the review based at least in part on combining quantitative assessments from the received evaluations for the review, one or more of the generated aggregate assessments being further based on the single existing reputation weights of the evaluator users in such a

manner that a first quantitative assessment from a first evaluator user with a first reputation weight has a different impact on that generated aggregate assessment than that first quantitative assessment from a distinct second evaluator user with a distinct second reputation weight;

(D) an evaluator reputation assessor component configured to automatically update the single existing reputation weights for each of one or more of the evaluator users for the Web merchant based on a relationship of the quantitative assessments from the evaluation of that evaluator user to the quantitative assessments from the evaluations of other of the evaluator users ...

Thus, as is clear from the language of claim 59, the recited claim language of “the quantitative assessments from the evaluation of that evaluator user” for each of one or more content rating dimensions in claim element (D) obtains antecedent basis only from claim element (B), with respect to that evaluator user’s evaluation of the single item review first introduced in claim element (A). Similarly, as is clear from the language of claim 59, the recited claim language of “the quantitative assessments from the evaluations of other of the evaluator users” in claim element (D) also obtains antecedent basis only from claim element (B), with respect to those other evaluator users’ evaluations of that single item review first introduced in claim element (A). Accordingly, the only possible interpretation of these recited claim elements of claim 59 that is consistent with the actual language of the claim is that the various evaluations that are used in the automatic updating of one or more evaluator users’ reputation weights are evaluations of a single piece of content (which in claim 11 is the single item review, whose contents are being assessed), with the updating being based on determined relationships between different evaluator users’ quantitative assessments of the contents of the same item review.

Thus, Appellant fails to understand how the Examiner’s Answer can repeatedly allege a position that is clearly incorrect, involving the recited claim element (d) of claim 11 and the recited claim element (D) of claim 59 allegedly covering evaluations by users of different content pieces, and more generally related to different types of activities of different types of users at different times. Nonetheless, given the incorrect interpretation of the claim language of claims 11 and 59 in the Examiner’s Answer, the Examiner’s Answer goes on to conclude that the disclosure of Tiwana discloses the recited claim element (d) of claim 11 and the recited claim element (D) of claim 59 – in particular, the Examiner’s Answer argues that if a first user submits comments on a particular item and if other users vote on whether those comments are useful or

not, with those votes affecting the ranking of the first user, those other users' votes and the first user's originally submitted comments correspond to the evaluations of the same piece of content by various users as is discussed above in claim elements (a), (b) and (d) of claim 11 and in claim elements (A), (B) and (D) of claim 59. (Examiner's Answer, pages 36-38). However, this disclosure of Tiwana clearly fails to disclose the subject matter of claims 11 and 59, given the correct interpretation of the claim language of claims 11 and 59 – in particular, in the outlined scenario, the first user's comments are about aspects of a particular item, and the other users' votes are about the content of the first user's comments, which clearly are not evaluations by different users of a single piece of content.

Thus, given the correct interpretation of the claim language of claims 11 and 59, it is clear that the Tiwana, Williams and Konstan references (whether alone or in combination) fail to disclose any related functionality. As is discussed in greater detail in the Appeal Brief, Tiwana lacks any disclosure of determining any reputation weight of any user that evaluates content from other users, and instead is related to ranking "reviewer" users who provide content, such as in a manner analogous to the "reviewer user" who supplies an item review in claim element (a) of claim 11 and claim element (A) of claim 59 – moreover, in Tiwana, a particular user's rankings appears to be based only on that particular person's activities in contributing item reviews (based on how those item reviews are manually rated by other users), not based on any evaluations that are provided by that particular person or others' reviews. In addition, in Williams, a worker can earn various reputation-related credentials based on the worker's activities (*e.g.*, how many comments or votes the worker provides and whether the worker suggests recommendations for an idea that are followed by an administrator) and how the worker's posted comments are evaluated by other users, but those credentials are not determined or otherwise updated based on how a worker's quantitative assessments of others' content relates to other worker's quantitative assessments of that same content. Konstan fails to remedy the above-discussed deficiencies of Tiwana and Williams with respect to independent claims 11 and 59, as Konstan appears to be unrelated to updating an evaluator user's assessed reputation weight based on a relationship between the quantitative assessments provided by the evaluator user in an evaluation of a piece of content and the quantitative assessments provided by other evaluator

users in evaluations of the same piece of content, and the final Office Action and Examiner's Answer do not allege that Konstan is relevant to these recited claim elements.

Accordingly, as noted above and as discussed in greater detail in Sections VII(A)(1), VII(A)(2) and VII(B) of Appellant's Appeal Brief, one reason that claims 11-38 and 59-72 are clearly patentable over the Tiwana, Williams and Konstan references, whether alone or in combination, is the incorrect interpretation of these claims that is relied upon in their current rejection.

2. Assessing Content Evaluation Activities Of Evaluator Users Rather Than Content Generation Activities Of Author Users

As a second mischaracterization that is presented in the Examiner's Answer, the Examiner's Answer argues that different users engaged in different types of activities in the prior art all correspond to a single type of content evaluation activity recited in independent claims 11 and 59. In particular, as noted above, the Examiner's Answer argues that disclosure in the Tiwana reference involves a first user that submits comments on a particular item and involves other users that vote on whether those comments are useful or not, and then concludes that the first user who submits comments and the other users providing usefulness votes are all "evaluator users" as discussed in claims 11 and 59.

However, these allegations in the Examiner's Answer regarding the interpretation of claims 11 and 59 are clearly wrong, and these additional errors in claim interpretation and in interpretation of the prior art further demonstrate that the Tiwana and Williams references lack any relevance to the actual recited claim elements. For example, with respect to claim 11, it recites the following in part (with the same alphabetical identifiers added above being used again here for reference purposes):

- (a) receiving from a reviewer user a review related to an item available from a Web merchant, the receiving of the review being performed by one or more programmed computing systems of the Web merchant;
- (b) receiving multiple evaluations of the review, each of the multiple evaluations being from one of multiple evaluator users who each has an existing reputation weight for the Web merchant that is based at least in part on previous evaluations supplied by that evaluator user for multiple other reviews for items available from the Web merchant, each received

evaluation including a quantitative assessment of contents of the review for each of one or more of multiple content rating dimensions available for use in assessing the review;

Thus, as recited above in claim element (a), a “reviewer user” performs activities to provide a review of an item available from a Web merchant. Subsequently, as recited above in claim element (b), multiple other “evaluator users” perform other activities that involve supplying evaluations of that single review that each includes one or more quantitative assessments of the contents of that provided review with respect to one or more content rating dimensions, and those evaluator users have also each previously supplied evaluations for other item reviews. Accordingly, the multiple “evaluator users” of claim 11 each repeatedly perform activities that involve evaluating item reviews provided by others, and with the “reviewer user” performing significantly different activities to author and supply one or more such item reviews. While not repeated here for the sake of brevity, independent claim 59 similarly recites differing activities of a “reviewer user” and multiple “evaluator users.” Appellant’s application as filed describes similar details related to such evaluator users and reviewer users, with reviewer users who supply item reviews being one type of author user who provides authored content that is subsequently evaluated, including the following (with emphasis added):

[0016] A software facility is described below that manages a variety of types of content in order to identify content that has attributes of interest, such as content that is useful to people other than the author of the content. In particular, in some embodiments the system obtains evaluations from users of available content ... and uses them a variety of ways, including to assist in the identification of content with various attributes of interest. As illustrative examples, the content being evaluated and managed may include item reviews and/or how-to guides provided to a Web merchant by user authors ...

[0018] In particular, and as described in greater detail below, when content is first provided by an author, it may in some embodiments enter an initial evaluation phase in which content evaluations are solicited and received from various evaluator users, with the evaluations each including one or more quantitative ratings (e.g., a numerical value from a specified scale, or one of an enumerated set of ratings) of the content. After sufficient evaluations are received, the evaluations for the content are aggregated in order to generate one or more aggregate ratings for the content, with the aggregate rating(s) for the content then used during a post-evaluation phase when determining whether/when to display or otherwise provide or indicate the content to other users (also referred to as “surfacing” the content). ...

[0021] ... For example, with respect to calculating a reputation rating score for an author, a specified number of pieces of content that were previously authored by the

author and subsequently rated may be used, with the reputation rating score for the author being the average of aggregate content rating scores for those pieces of content. The reputation ranking score for the author for those (or other) pieces of content can then be calculated by, for example, aggregating (e.g., summing) the aggregate content rating scores for each of those pieces of content. Calculation of a reputation voting weight score for the author may be performed based on, for example, the consistency of the quality of the content produced by the author over those (or other) pieces of content, such as based on the aggregate ratings. Specific examples of such calculations are discussed below for illustrative purposes.

[0022] Various reputation scores can also be calculated for evaluators in a similar manner. For example, with respect to calculating a reputation rating score for an evaluator, in some embodiments a specified number of evaluations that were previously provided by the evaluator for content that was subsequently rated may be used, with the reputation rating score for the evaluator based on the average degree of agreement of the evaluator's evaluations with a consensus evaluation of that content. If consensus was not reached among the evaluators of a piece of content, as discussed in greater detail below, that content and its evaluations may in some embodiments not be used for calculating reputation scores. The reputation ranking score for an evaluator for those (or other) evaluations can be calculated by, for example, aggregating (e.g., summing) a quantitative representation of the degree of agreement with the consensus for each of those evaluations. Calculation of a reputation voting weight score for the evaluator may be performed based on, for example, the evaluator's reputation rating score over those (or other) evaluations, such as to give evaluators with the highest degree of agreement with consensus evaluations the most voting weight. Specific examples of such calculations are provided below for illustrative purposes. ...

[0028] In addition, in some embodiments a piece of content may receive multiple quantitative ratings from each evaluator, such as one for each of multiple rating dimensions for that content, with such content rating dimensions each related to one or more attributes (or aspects or qualities or properties) of the content (e.g., usefulness, accuracy, informativeness, inappropriateness, humorousness, etc.). ...

Thus, as recited in claims 11 and 59, reviewer users and evaluator users engage in different types of activities for different purposes, in accordance with Appellant's application as filed, and thus may receive different types of reputation scores based on those different types of activities.

Conversely, the Examiner's Answer quotes an excerpt from the Tiwana reference that discloses activities of users who provide reviews with comments about items, and then argues that such review-providing users are the "evaluator users" of claims 11 and 59 whose evaluation-based reputation weights are recited as being updated. In particular, the Examiner's Answer states the following, with emphasis added:

Tiwana teaches (page 247 column 2):

... Customers can ... comment on books, music, and other products that the company sells. ... Other members can add value ratings on a simple two-level feedback scale that identifies whether specific customers who read those comments found them to be of value. ... the original contributors' profiles are populated with an increasing count of useful/useless votes. Individual contributors are then assigned a rank, and the highest ranking customers are given additional recognition as being the "Top 10", "Top 100", or "Top 1,000" reviewers.

Thus, as shown by Tiwana, the weight of an evaluator user is updated (i.e., as to whether they are weighted as being a Top 10, 100 or 1000 user) based on others evaluations of how that evaluator user reviews an item. The claim recites that there is a relationship (an unspecified relationship) between how a particular user rates an item, and how others rate that first user's review of an item.

Examiner's Answer, page 37, emphasis added.

Thus, Tiwana describes activities of customers who comment on items (who are referred to in this excerpt of Tiwana alternatively as "contributors" and as "reviewers"), and also describes activities of other users who evaluate the usefulness of those comments based on voting. The contributor/reviewer users are then ranked based partially on the voting evaluations of the other users. Accordingly, Tiwana describes content submission activities of contributor/reviewer users who provide comments, and other evaluation activities of other users who vote on the usefulness of those provided comments of the contributor/reviewer users – to the extent that these described users in Tiwana correspond to the recited claim elements of claims 11 and 59, the contributor/reviewer users who provide comments are at least somewhat analogous to the "reviewer user" recited in claims 11 and 59, and the other users who evaluate the usefulness of those provided comments of the contributor/reviewer users are at least somewhat analogous to the multiple "evaluator users" recited in claims 11 and 59.

Nonetheless, despite Tiwana describing such different activities of the contributor/reviewer users who provide comments and the other users who evaluate the usefulness of those provided comments, the Examiner's Answer concludes in the excerpt shown above that these various differing users of Tiwana are all "evaluator users" as recited in claim 11 and 59, and more specifically that the contributor/reviewer users of Tiwana correspond to the recited "one or more evaluator users" of claims 11 and 59 whose reputation weights are updated.

However, this allegation is clearly incorrect, as there is no discussion in Tiwana of any activities of the contributor/reviewer users that correspond to providing evaluations of item reviews supplied by other users that include quantitative assessments of the contents of those item reviews with respect to one or more content rating dimensions, as the “evaluator users” of claims 11 and 59 are generally recited to perform, or more generally that these contributor/reviewer users of Tiwana perform any activities that are in any way analogous to those of the “evaluator users” of claims 11 and 59. Furthermore, Appellant notes that the final Office Action appears to take a significantly different position with respect to the disclosure of Tiwana than that of this new position in the Examiner’s Answer, as the final Office Action admits that “Tiwana ... does not teach ...each of the evaluator users having an existing reputation weight based at least in part on previous evaluations” (Final Office Action dated April 22, 2010, page 29), as well as that Tiwana lacks other recited claim elements related to use of such reputation weights.

Thus, given the correct interpretation of the claim language of claims 11 and 59, it is clear that Tiwana fails to disclose any activities that are related to updating reputation weights of “evaluator users,” and Tiwana more generally fails to disclose any idea of any such “evaluator users” receiving anything analogous to a reputation weight or any other ranking. As discussed in greater detail in the Appeal Brief, neither of the Williams and Konstan references remedies this further deficiency of the Tiwana reference.

Accordingly, as noted above and as discussed in greater detail in Sections VII(A)(1), VII(A)(2) and VII(B) of Appellant’s Appeal Brief, another reason that claims 11-38 and 59-72 are clearly patentable over the Tiwana, Williams and Konstan references, whether alone or in combination, is the incorrect interpretation in the Examiner’s Answer of the disclosure of the Tiwana reference with respect to the claim elements of these claims corresponding to a “reviewer user” and multiple “evaluator users”, which is relied upon in the current rejection of these claims.

3. Lack Of Motivation To Add Completely New Functionality To The Tiwana, Williams and Konstan Reference Systems

As a third mischaracterization that is presented in the Examiner’s Answer, the Examiner’s Answer asserts that Appellant in the Appeal Brief “argues that there is no motivation

as to why someone would modify Tiwana's teachings with those of Williams, citing KSR" (Examiner's Answer, page 43), and then proceeds to attempt to argue why it would be obvious to combine teachings from Tiwana and Williams.

However, while it is true that sufficient motivation to combine teachings from Tiwana and Williams does not appear to have been demonstrated in the final Office Action, that is not what was argued by Appellant in the Appeal Brief. Instead, Appellant first demonstrated that neither of the Tiwana and Williams references have any disclosure that corresponds to multiple of the recited claim elements of claim 11. Appellant then concluded that, even if one assumed for the sake of argument that motivation did exist to create a hypothetical combination of Tiwana and Williams, that no motivation exists to further modify such a hypothetical combination to add completely new functionality corresponding to those multiple recited claim elements of claim 11 for which both Tiwana and Williams lack any corresponding disclosure. In particular, Appellant noted that "no reason is apparent why one of skill in the art would be motivated to modify the systems of the relied-upon Tiwana and Williams references to include the missing claimed features and techniques discussed above ... nor how the Tiwana and Williams systems could be operable if modified to include such claim elements." (Appellant's Appeal Brief, pages 19-20). Thus, even if it was correct that motivation exists to create a hypothetical combination of Tiwana and Williams, Appellant maintains that no motivation exists to further modify such a hypothetical combination of Tiwana and Williams to add completely new functionality corresponding to the multiple recited claim elements of claim 11 for which both Tiwana and Williams lack any corresponding disclosure.

Therefore, another reason that claims 11-38 and 59-72 are clearly patentable over the Tiwana, Williams and Konstan references, whether alone or in combination, is that no motivation exists to modify a hypothetical combination of these references to further include completely new functionality corresponding to multiple recited claim elements of claims 11-38 and 59-72 for which Tiwana, Williams and Konstan lack any corresponding disclosure.

Accordingly, for the reasons discussed above, and as discussed in greater detail in the Appeal Brief for separate reasons for each of independent claims 11 and 59 and dependent claims 71-72, the final Office Action and the Examiner's Answer have failed to establish that

any of the claims 11-38 and 59-72 are obvious in light of the Tiwana, Williams and Konstan references, whether alone or in combination.

B. Rejection of Claims 49-56 and 58 Under 35 U.S.C. § 103(a) based on Tiwana and Delgado

A combination of the Tiwana and Delgado references fails to disclose or otherwise render obvious the elements of independent computer-readable medium claim 49, nor the claim elements of claims 50-56 and 58 that depend from claim 49. Thus, these claims are not obvious in light of the Tiwana and Delgado references, whether alone or in combination.

Moreover, Appellant demonstrated in the Appeal Brief that the Tiwana and Delgado references fail to disclose or otherwise render obvious several claim elements recited in independent claim 49, as discussed briefly below, and in greater detail in the Appeal Brief. Accordingly, the final Office Action fails to establish that these claims are obvious in light of the Tiwana and Delgado references.

The Examiner's Answer has responded to Appellant's demonstration in the Appeal Brief regarding independent claim 49 by mischaracterizing various of the recited claim elements and corresponding aspects of Appellant's statements in the Appeal Brief, as well as making allegations that are clearly incorrect. Accordingly, Appellant addresses these allegations and mischaracterizations below.

As a brief restatement of the demonstration made in the Appeal Brief with respect to independent claim 49, independent claim 49 is, in a manner similar to that of independent claims 11 and 59, generally related to automated operations of a configured computing device that include, after receiving evaluations of a single piece of content from multiple evaluator users that each includes a quantitative assessment of that content, automatically updating an assessed reputation weight for one of those evaluator users based on a relationship of that one evaluator user's quantitative assessment for that content piece to the quantitative assessments of other of the evaluator users of that same content piece. As discussed in Appellant's application as filed, such assessment of a particular evaluator user's quantitative assessment of a content piece relative to other evaluator users' quantitative assessments of the same content piece may provide

various benefits, including to automatically evaluate the ability of that particular evaluator user to demonstrate consensus with other evaluator users. Furthermore, the assessed reputation weights of the multiple evaluation users are used as part of automatically generating an aggregate assessment of the content of the received item review based on the quantitative assessments of the multiple evaluator users of that content.

Conversely, the Tiwana and Delgado references (whether alone or in combination) fail to disclose any functionality related to maintaining an existing reputation weight for an evaluator user based on prior evaluation activities, and of using that reputation weight to assess newly submitted content that is evaluated by that evaluator user. In addition, given this lack of disclosure, the Tiwana and Delgado references (whether alone or in combination) further fail to disclose any functionality related to updating such an assessed reputation weight of an evaluator user based on a relationship between the quantitative assessments provided by the evaluator user when evaluating a piece of content and the quantitative assessments provided by other evaluator users when evaluating the same piece of content.

Some of the mischaracterizations and other incorrect allegations in the Examiner's Answer related to independent claim 49 are similar to those discussed above with respect to independent claims 11 and 59, and thus are discussed here only briefly for the sake of brevity.

As one example, in a manner similar to that discussed above with respect to independent claims 11 and 59, independent claim 49 recites differing activities of a "reviewer user" and of multiple "evaluator users." Nonetheless, the Examiner's Answer appears to argue, with respect to the disclosure in the Tiwana reference involving a first user that submits comments on a particular item and involving other users that vote on whether those comments are useful or not, that the first user who submits comments and the other users providing usefulness votes are all "evaluator users". (Examiner's Answer, pages 36-38 and 48). However, as discussed in greater detail above with respect to independent claims 11 and 59, these allegations in the Examiner's Answer regarding the interpretation of the Tiwana reference is clearly wrong, and Tiwana fails to disclose any idea of "evaluator users" analogous to those recited in claim 49 that receive anything analogous to a reputation weight or any other ranking,

and thus Tiwana cannot further disclose any activities that are related to updating such reputation weights of such “evaluator users” based on other evaluations by other evaluator users of the same piece of content.

The Delgado reference fails to remedy this deficiency of the Tiwana reference, as discussed briefly below and in greater detail in the Appeal Brief. For example, despite the allegations of the final Office Action and Examiner’s Answer, Delgado does not assess and maintain a distinct reputation weight for each evaluator user, and instead merely determines the similarities of particular pairs of users to each other. In particular, Delgado discusses a type of recommendation system referred to as a “collaborative filtering” recommendation system, in which the system attempts to make a recommendation for a particular user (referred to in Delgado as the “active user”) in a manner that is specific to that particular active user. To make a recommendation for a first active user, the system determines the similarity of the first active user to each of multiple other users, and uses information about the preferences of the other users to predict preferences of the first active user, based in part on the similarities specific to that first active user for the multiple other users. For example, Delgado indicates the following:

Recommender Systems are learning systems that make use of data representing multi-user preferences over items ..., to try to predict the preference towards new items or products regarding a particular user. ... In general, the task in Recommender Systems is to predict the votes of a particular user (called the active user) over a given subject or item, for deciding its recommendation. ... In Memory-based collaborative filtering algorithms [1], commonly used for Recommender Systems, the vote prediction of an active user ... is done based on some partial information regarding the active user and a set of [sic, of] weights ... The weights $ws(a,i)$ express the similarity between each user i and the active user a .

(Delgado, page 1, columns 1 and 2).

Thus, when making a recommendation for a first active user, the system determines the similarity of the first active user to each of multiple other users, and uses a first weighting corresponding to those other users based on the similarity to the first active user. However, when making a recommendation for a distinct second active user, the system similarly determines the similarity of the second active user to each of the same multiple other users, but determines a different second weighting to use corresponding to those other users (assuming that the first and second active users do not have identical preferences and other related information), since the similarities of those other users to the second active user will be different from the

similarities of those same other users to the first active user. Accordingly, Delgado does not disclose a system in which each evaluator user is given a particular reputation weight based on past evaluation activities, and in which a particular evaluator user's assessed reputation weight is updated based on a relationship between that evaluator user's evaluation of a content piece and other evaluator user's evaluations of the same content piece – instead, in Delgado, the relevance of a particular user's past votes will be given a different weight for each active user for whom a recommendation is made, in a manner specific to that active user and in order to reflect similarities to that active user, rather than based on any inherent aspects of the other particular user's past votes. Stated in another manner, for any given evaluator user, that evaluator user will have a different inter-user pair similarity weight for every other user that may be treated as an active user, thus resulting in hundreds or thousands (or more) of such inter-user pair similarity weights for a given evaluator user at a given time for a typical system. Accordingly, even if the inter-user pair similarity weights of Delgado were assumed for the sake of argument to be analogous to the recited reputation weights that are assessed for evaluator users in claim 49, which they are not, attempting to update each of those inter-user similarity weights of Delgado in the manner recited in claim 49 would not make sense, as it would destroy the utility of such an inter-user similarity weight in identifying the similarity between a pair of two users, and would render the Delgado system inoperable.

In addition, the Examiner's Answer similarly mischaracterizes Appellant's argument in the Appeal Brief regarding the lack of motivation to introduce completely new functionality that is recited in claim 49 and is missing in both the Tiwana and Delgado references. In particular, the Examiner's Answer asserts that Appellant in the Appeal Brief "argues that there is no motivation as to why someone would modify Tiwana's teachings with those of Delgado, citing KSR" (Examiner's Answer, page 49), and then proceeds to attempt to argue why it would be obvious to combine teachings from Tiwana and Delgado. However, while it is true that sufficient motivation to combine teachings from Tiwana and Delgado may not have been demonstrated in the final Office Action, that is not what was argued by Appellant in the Appeal Brief. Instead, Appellant first demonstrated that neither of the Tiwana and Delgado references has any disclosure that corresponds to multiple of the recited claim elements of claim 49, and then concluded that, even if one assumed for the sake of argument that

motivation did exist to create a hypothetical combination of Tiwana and Delgado, that no motivation exists to further modify such a hypothetical combination to add completely new functionality corresponding to those multiple recited claim elements of claim 49 for which both Tiwana and Delgado lack any corresponding disclosure. In particular, Appellant noted that “the final Office Action fails to provide any reason that one of skill in the art would be motivated to modify the systems of the relied-upon Tiwana and Delgado prior art references to include the functionality described above that they lack, or how the prior art reference systems could even obtain the recited types of information to use in the recited manners,” and further noted that “Delgado teaches away from using reputation weights of evaluator users in the claimed manners, and would be inoperable if modified to attempt to use them.” (Appellant’s Appeal Brief, pages 27-28). Thus, even if it was correct that motivation exists to create a hypothetical combination of Tiwana and Delgado, Appellant maintains that no motivation exists to further modify such a hypothetical combination of Tiwana and Delgado to add completely new functionality corresponding to the multiple recited claim elements of claim 49 for which both Tiwana and Delgado lack any corresponding disclosure.

Accordingly, for the reasons discussed above, and as discussed in greater detail in the Appeal Brief in Sections VII(C), the final Office Action and the Examiner’s Answer have failed to establish that any of the claims 49-56 and 58 are obvious in light of the Tiwana and Delgado references, whether alone or in combination.

C. Summary

For the reasons stated above, all the pending claims are patentable, and Appellant requests that the rejections of the pending claims from the final Office Action be reversed, and that all the pending claims be found to recite patentable subject matter.

Respectfully submitted,

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